

Appl. No. 09/849,049
Amdt. Dated December 12, 2005
Reply to Office action of Sep. 4, 2003

Amendment to the Specification:

Please replace the full paragraph on page 11 with the following amended paragraph:

Refer now to Figure 8 showing an isometric drawing of the singulation saw 8 showing the counter-rotating saw blades and a Y-axis positioning drive for the saw and the support gantry for the working head that supports the dual spindle saws. The linear actuators 35 and 36 are shown supporting their carrier supports 37 and 38 mounted on mounting and alignment blocks 41 which fit into the recesses 27 of the base or support 26 for the saw 8. It will be noted that the substrate carriers 42 and 43 at the top of the carrier supports 37 and 38 are adapted to receive rectangular substrate strips and are provided with a vacuum source V which extends below the substrate (not shown) and that the substrate carriers 42 and 43 are accurately positionable from one position shown to an orthogonal position 90 degrees from that shown so that the substrate carriers may pass each other during operation of the transport system. The novel system includes a vision system comprising a vision system camera 44 mounted on a Y-axis linear actuator 45 comprising a Y-axis motor 46. The Y-axis actuator is moveably mounted on a mounting bracket 48 which mounts on the base or support 26. It will be understood that the camera 44 may be accurately positioned in X and Y over a substrate carried by one of the substrate carriers 42 or 43 in either of their orthogonal positions when at the left-most vision station end under the vision camera system position as shown at substrate carrier 42.

Please replace the ABSTRACT OF THE DISCLOSURE on page 25
with the amended ABSTRACT:

BIDIRECTIONAL SINGULATION SAW AND METHOD

ABSTRACT